JPRS 79537 27 November 1981

# Worldwide Report

**EPIDEMIOLOGY** 

No. 256

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27 November 1981

# WORLDWIDE REPORT EPIDEMIOLOGY

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MEASLES OUTBREAKS--Posadas, Misiones, 3 Nov (TELAM)--In view of information from Foz de Iguacu, Brazil, on an alleged outbreak of measles, Enrique Schmidt, director of the Puerto Iguacu Hospital, stated that there is no immediate danger since a massive vaczination and fumigation campaign is being carried out in this city. [Buenos Aires TELAM in Spanish 0029 GMT 4 Nov 81] Bahia Blanca, 6 Nov 81 (NA)--Although the number of measles cases amounts to 250, Edgar Marcilese, head of Sanitary Area No 1, has stated that it is not a case of an epidemic and that it is not serious. He said that it is a seasonal outbreak which takes place every 5 or 6 years and that the last time it was registered there were double the number of cases. [Buenos Aires Noticias Argentinas in Spanish 1344 GMT 6 Nov 81]

CHAGAS DISEASE--La Rioja, 10 Nov (TELAM)--Physician Oscar Graniullo Valdez, public health secretary, disclosed that according to the results of a survey 6 out of 100 persons in three departments of La Rioja are infested with chagas disease. [Buenos Aires TELAM in Spanish 1300 GMT 10 Nov 81]

120 CHOLERA DEATHS--Dacca, 23 Oct--At least 120 people died of cholera and diarrhea in a sudden outbreak of the epidemic in several parts of Bangladesh in the past month, Health Department sources said today. The officials, quoted by the daily ITTEFAQ, said 64 people died of cholera in the past month in western Rajshahi District where medicines were scarce. The state-owned Bengali daily DAINIK BANGLA reported that 29 people died of cholera in southwestern Kushtia District and 28 in southern Noakhali District during the last fortnight. It said the hospital sources in the affected areas identified the disease as diarrhea but denied that cholera had broken out. The dailies said many people had already been affected by the disease and at least four to five people were being admitted to hospitals every day.--NAB/REUTER [Text] [Rangoon THE WORKING PEOPLE'S DAILY in English 25 Oct 81 p 7]

#### CTC'S VEIGA DISCUSSES DENGUE ERADICATION CAMPAIGN

Havana TRABAJADORES in Spanish 5 Sep 81 p 2

[Speech by Roberto Veiga Menendez, secretary general of the CTC [Central Organization of Cuban Workers], alternate member of the Politburo of the Communist Party of Cuba, at the closing session of the national seminar for trade union leaders on the eradication of dengue and the carrier mosquito; date not given]

#### [Text] Comrades:

As you know, the main areas of concentration of dengue were announced at the end of last month. They were basically in Havana City, but were later extended to the entire country and the disease became an epidemic. In the face of this situation, the party and government outlined an emergency program to fight the disease and in particular, the carrier, the Aedes aegypti mosquito.

For that reason, the CTC and the trade unions drew up an immediate and medium-range program in order to incorporate the workers into this great battle of the people to eradicate the disease and the carrier mosquito, in an organized manner.

In order to carry out these aims, a plan of work was drawn up. A fundamental place was given to the training of trade union leaders about the disease and ways of fighting the mosquito so as to undertake a program of self-inspection making it possible to detect and wipe out the hotbeds or breeding grounds of this carrier in the factories, on the farms, at service and educational centers and other work centers in the country. The objective of the initial plan was: to develop self-inspections in the unions so as to learn real or potential breeding grounds of the mosquito and accomplish their eradication; to promote the active participation of the trade union movement to see that government agencies carry out measures aimed at eradicating breeding grounds of the Aedes aegypti at work centers; and to disseminate the sanitary measures drawn up for the fight against the epidemic among the workers, backing their massive incorporation into tasks deriving from its control.

Throughout the country, a program of meetings began immediately in order to direct the plan, with the participation of provinces and municipalities of the CTC, national unions, their intermediate organs and trade union bureaus and sections.

Once this phase of preparation was over, the first self-inspection in the unions began, from 20 to 31 July, involving 37,601 work centers and 2,173,148 workers. In

this process, some 64,676 breeding grounds or hotbeds were found. Of these, 55,066 were destroyed during the self-inspection process itself, or 85 percent.

Of the hotbeds or breeding grounds not destroyed, 3,531 were left for higher levels because of a lack of resources at the level of establishments, enterprises and budgeted units in order to carry out the measures set forth. Basically, these were large scrap dumps, mainly at the sugar mills, problems of drainage at agricultural and farm enterprises and closed centers in the educational and other critical centers.

Following the self-inspection, as prescribed, an assembly process began from 1 to 10 August, with the participation of over 1.4 million workers. At these assemblies, existing problems were debated in order to demand solutions to matters depending on government offices and draw up a plan of mobilization for the sanitation and cleanup of work centers. A total of 17,536 resolutions were passed during this process.

Once the first phase was completed, the second self-inspection in the unions began on 20 August, involving over 40,000 production, service or educational centers throughout the country. Yesterday, Tuesday, 1 September, we began the second assembly process, in order to evaluate compliance with the 17,536 resolutions and analyze the result of the self-inspections, completed this time with much better quality and experience. The national inspection for this second phase has been scheduled for 22 September and we are available for self-inspections on a monthly basis until we can declare that all work centers in the country are free of the Aedes aegypti mosquito.

Cleanup, Sanitation and Hygiene

The battle against the mosquito has become a constant campaign to clean, sanitize and make all work centers hygienic. It has the enthusiastic, fighting participation of hundreds of thousands of workers. The workers' initiative has also been observed in the dozens of spraying teams set up by our innovators.

The CTC appeal to make every worker a soldier in the battle against the Aedes aegypti mosquito is forcefully materialized in action.

We now enter the phase of carrying our work further, of consolidating the battle against the mosquito and organizing our workers in order to maintain and improve hygiene and the cleanliness of our work centers and surrounding areas. As Fidel says, "We must be strict in the application of technical-sanitary measures for the eradication of the mosquito, through detailed, exact, honest work."

As part of the medium-range program, the CTC decided to schedule this seminar with the participation of secretaries who handle work safety and hygiene in the national trade unions and the provinces and municipalities of the CTC, which is precisely the activity we are concluding this afternoon.

This seminar was organized for two days, with an intensive program forcing us to meet in the morning, afternoon and at night in order to meet the objectives set forth. However, its theoretical as well as practical content has enabled you to have a general idea of the dengue situation in the country and the program for its elimination, the characteristics of the mosquito breeding grounds and the way to eliminate them, as well as equipment to be used for the purpose.

We have also studied techniques to be utilized to control rats and mice, which as you know are also the cartiers of diseases such as bubonic plague, murine typhus, rabies, and so on. Studying these aspects will enable us to ascertain what measures are to be taken in the intensive fight we shall soon begin against these rodents.

We consider the practical work at the work centers, together with the Ministry of Public Health sanitation workers, to be very important as part of the issues dealt with at this seminar. Our comrades from the Social Food Director of the Ministry of Domestic Commerce reported on everything relating to measures to improve sanitary and hygienic conditions in the handling and processing of food at worker cafeterias.

Because of its brevity, the seminar, the program was extremely intense, but we believe that the issues taken up were deserving of the effort made.

#### Battle Won in Trenches

It is important to emphasize that at the close of this seminar, the CTC in each province and municipality in the country, in close coordination with the Health Directorate of the People's Government, must organize seminars during the month of September — after working hours — in the intermediate and rank-and-file instances of all unions. We must remember that this battle can only be won in our advance trenches, which are our work centers. To the extent that we improve the knowledge of the leaders of the trade union sections and the workers, we shall better be able to wage and win this battle for the health of our workers and all the people.

### Consolidate Knowledge

All of this work has without a doubt provided us with valuable experience in fighting the mosquito, but we must consolidate our cadres' and workers' knowledge that is indispensable in continuing the work. This seminar has laid the foundations for the broad plan we must undertake in order to train our workers and give them an exareness of health enabling us to win this battle and achieve a level of understanding in keeping with the need to eliminate the mosquito, the carrier of dengue and a potential agent of many other diseases.

Our immediate task, now that we are more prepared, is to continue the monthly program of self-inspections aimed at localizing and destroying every hotbed or breeding ground of the Aedes aegypti mosquito that might exist at our labor centers, as well as at promoting the development of a wide-ranging plan of sanitation and cleanup so as to eliminate the mosquito and improve hygiene at all places of work.

At the regular production and services assemblies held every month, it is necessary to continue the topic throughout the year, entering into discussions with workers concerning measures to be undertaking with the aim of eliminating problems detected during self-inspections, resolutely requiring that no problem be left unsolved or commitment unfulfilled. Particular attention must be given to empty premises and facilities and to problems that must be solved at another level, where the measures are taken and where it is decided who is to carry them out and on what date.

Strength of Socialism

#### Comrades:

As you know, along with this plan, the entire country is engaged in the intensive phase of the program to eliminate the dengue epidemic and its carrier, the Aedes aegypti mosquito, which program is in itself an extraordinary example of the strength of socialism, in which man is the supreme goal of society.

In the report given by Commander in Chief Fidel on the occasion of the 28th anniversary of 26 July, the suspicious and explosive nature of the epidemic was explained, along with the enormous efforts made by imperialism to block the purchase of products and equipment needed to eradicate the mosquito, its carrier.

# "At Your Service!"

This reveals once again the vile and base plans of our enemies to destroy the revolution. Our response, as at the Bay of Pigs, is "Commander in Chief, at your service!" Whatever the cause, the working class, as the guiding force of the revolution and under the banners of socialism in the first free territory of America, will join with all our people in winning all the battles.

Fidel also warned us: "But this is a battle of all the people. Apart from the thousands of men whose profession it is to engage in this task, it is necessary to have the participation of all the people, to inform the people about the mosquito, its characteristics and habits, to inform the people of all the measures so that they may offer complete cooperation.

"We believe that if a nation can eradicate this mosquito, that nation is Cuba, because of its organization, the level of culture of its people and the spirit of discipline and work that our people have."

#### Comrades:

In conclusion, we must express our gratitude to our comrades in Public Health and the Ministry of Domestic Commerce for their help during the seminar. Finally, we urge you once more to give your maximum attention to this task.

You must be vanguard soldiers in this great battle being waged by all our people, answering the appeal of our commander in chief, Comrade Fidel, following the slogan "Every worker is a soldier in the fight against the Aeies aegypti mosquito."

Thank you.

11,464 CSO: 5400/2022

EL SALVADOR

#### BRIEFS

CONJUNCTIVITIS CASES IN SANTA ANA--Santa Ana, 8 Oct--At least 80 cases of hemorrhagic conjunctivitis have appeared in the 2nd Infantry Brigade among troops and workers, according to reliable sources. The information was obtained by this correspondent during a visit to Santa Ana assistance centers. The doctors interviewed reported that the epidemic was not as serious as it had been suggested in some of the mass media. The director of San Juan de Dios Hospital, Dr Rafael Martinez, said that at that center so far only 15 cases have been identified and treated. He added that he was aware that at the hospital facility of the ISSS [Salvadoran Institute of Social Security], 70 cases had been reported. Another doctor in charge of treating the sick of the brigade reported that 80 of its members had become sick. [Text] [San Salvador EL MUNDO inSpanish 8 Oct 81 p 3] 2662

JALAPA ANTI-MOSQUITO CAMPAIGN—According to what police authorities of the Department of Jalapa said today, sources of larva, carriers of tropical diseases, such as dengue, yellow fever and malaria, were found there by the authorities of the campaign against the Aedes aegipti mosquito. Mr Vidal Medrano Castillo, head of the campaign, said that sources of larva of the mosquito were spreading in the zone, and therefore he advises the inhabitants to take the appropriate precautions. Such spreading could cause an epidemic of dengue or other tropical diseases. Among the steps to be taken are: constantly change the water in tanks or keep fish to eat the larvae. Members of the anti-mosquito campaign also advise that water tanks in cemeteries, especially in flower beds, should not be used; instead, river sand should be used. To definitely keep away mosquitoes, refuse and used tires should be burned, it was said. [Text] [Guatemala City EL IMPARCIAL in Spanish 25 Sep 81] 9678

MEASLES OUTBREAK--The outbreak of measles which has occurred in various sectors of Zone 7 of the capital claimed its first victim yesterday, according to inhabitants of that zone. The victim is Maria Haydee Garcia, 13 years old, who was stricken by the disease and nothing could be done to save her. Those grieving maintain that in Zone 7 there are at least 50 cases of measles and as a result they are asking the Ministry of Health and Social Assistance to send doctors to take care of those affected. [Text] [Guatemala City EL IMPARCIAL in Spanish 25 Sep 81] 9678

ANTI-CRICKET CAMPAIGN--An anti-cricket campaign is taking place in Bissau since last Tuesday night, because the streets of our capital have been infested for a number of days with these insects, mainly in the better lighted areas. This initiative, which has been undertaken regularly in our country under the sponsorship of the directorate for environmental sanitation of the Ministry of Health and Social Affairs, is aimed at endowing our people with the best protective conditions for a healthy life immune to all vectors of disease, a note from this ministry states. Through this same note, health officials urge all owners of bars, restaurants, coffee shops, hotels and similar establishments to maintain proper hygienic conditions in them. [Text] [Bissau NO PINTCHA in Portuguese 31 Oct 81 p 3]

POLIO VACCINATION CAMPAIGN--A vaccination campaign for the third dose of polio vaccine for children 4 to 7 years of age is taking place in the area of Cantchungo. The campaign is being conducted under the directions of Comrade Lourenco da Costa, director general of public health in the region of Cacheu. [Excerpt] [Bissau NO PINTCHA in Portuguese 24 Oct 81 p 2]

RAE BARELI CHOLERA EPIDEMIC--Rae Bareli, Oct 5 (PTI)--At least seven persons died of cholera which has broken out in an epidemic form in some villages of this district. According to reports, six persons have been admitted to the district hospital here. Meanwhile, medical teams have been rushed to Kucharia, Khakrasi and Jaanrdan villages where deaths have occurred. [Text] [New Delhi PATRIOT in English 6 Oct 81 p 1]

NABABPUR CHOLERA DEATHS--Serampore, Oct. 6--Cholera claimed four lives at Nababpur village in the Chanditala area of Hooghly last weekend, Mr Ashoke Patnaik, District Magistrate of Hooghly, said today. Eight other people were suspected to be suffering from the disease. They were admitted to a primary health centre. Villagers alleged that there was no stock of medicines at the primary health centre. [Text] [Calcutta THE STATESMAN in English 7 Oct 81 p 3]

REFUGEES DIE OF MAIARIA--New Delhi, 3 Nov--One hundred and fifty tribal refugees from Bangladesh have died of malaria in various camps specially erected to accommodate them in the northeastern border state of Tripura, it was officially reported Monday. [Text] [kangoon THE WORKING PEOPLE'S DAILY in English 4 Nov 81 p 4]

# CHOLERA, TYPHOID REPORTED IN PENINSULAR MALAYSIA

House-to-House Search

Kuala Lumpur NEW STRAITS TIMES in English 22 Sep 81 p 8

[Text]

KUALA LUMPUR, Mon. — The health departments in Kelantan, Trengganu, and Perak are conducting in-tensive house-to-house checks to "flush" out choiers and typhoid cases.

The Director of Health Services, Ministry of Health, Datuk Dr Ezzadin Mehamed, said today that health teams were visiting all residents in the affected areas to identify and persuade victims of the diseases to get medical treat-ment quickly.

He said there was no cause for alarm as the situation was well under control.

He said that it was impor-tant that the department iden-tified the carriers as they were

the main source of spreading the disease.

A total of 42 cholers cases had so far been reported in Kelantan. Six of them had been hospitalised.

# Carriers

There were 106 carriers of the disease, of whom 10 had been hespitalised.

Another 12 patients sus-pected of having the disease had also been hespitalised.

The last case of cholera in Kelantan was reported four days ago.

in Trengganu, the de-partment found 10 chelera cases and five carriers. The last case was discovered on Sept. 18.

The Health Department in Trengganu found cholera bac-teria in certain parts of the Trengganu river and steps had been taken to chlorinate certain sections of the river.

In Perak, there were no cholera cases but there were 51 typhoid cases, mainly schoolchildren.

Two carriers and 36 suspects of typhoid had been hos-pitalised in Tapah. — Bernama.

# Cholera in Sabah, Sarawak

Kuala Belait BORNEO BULLETIN in English 26 Sep 81 pp 1, 48

[Text]

KOTA KINABALU.-Cholera is continuing to appear in Sabah and appear in Sabah and Sarawak but no deaths have been reported so

Last weekend saw 11 cholera victims enter hospital in Sabah along with seven carriers— carriers do not feel ill but can pass the diease germs on to others.

As in past outbreaks in the state, the main centres of infection are coastal villages built on stilts over the water.

These villages seldom have sanitary latrines but depend on the tide tocarry away human waste.

Four of the recently-admitted patients were from Pulau Gava near Kota Kinabalu, three from Singa Mata, Lahad Datu and four from Kampung Ice Box, Ta-.WBU.

The Medical Department is concentrating on crowded Kampung Ice Por, which seems to be struck hardest each cholera outbreak. Preventive treatment has been given to 11,000 people in the area.

In Sarawak, the number of confirmed cholera cases has reached eight and eight carriers have also been detected and treated.

All the cases have come from the Sibu and

Binatang areas.
The Medical Departments of both states conments of both states continue to stress the importance of using sanitary latrines, boiling drinking water and cooking, food thoroughly.

They also advise it is best not to eat or drink at roadside stalls.

Those suffering from diarrhoea and vomitting should report immediately to a hospital or clinic.

ly to a hospital or clinic: examination and: treatment.

#### REASON FOR MEASLES OUTBREAK IS NON-VACCINATION

Maputo TEMPO in Portuguese No 577, 1 Nov 81 pp 7-8

[Text] In just the pediatrics ward of the Central Hospital of Maputo 34 children died of measles during the last 3 weeks: 28 of them had not been vaccinated. This entire situation could have been avoided if everyone would have had their children vaccinated against this disease. At this time, even though it can safely be stated that many people take their children to vaccination centers, it must be admitted that the majority do not do so. This is not just disinterest, nor the pleasure of occupying hospital beds, or also because people are accustomed to seeing their children die. People are aware that vaccination is available, but have not been sufficiently informed of how effective it is in preventing the disease. It is not easy to convince people that the vaccine is 95 percent effective and only in very exceptional cases does it not provide the necessary immunity.

Health organisms have been working on this issue in recent years, but are still not successful. According to a health official in Maputo, the community's participation is essential. It is impossible to achieve results without the participation of the population. If we could successfully vaccinate 85 percent of the people, there would be no measles outbreak. Of course, many children have already been vaccinated, a total of 60 percent, but this is still not sufficient. For instance, 700 children died last year from measles, something that could easily have been prevented if only the children had been taken to the vaccination centers.

There have been no cases of measles in the Bagamoio District, and only a few in the Polana-Canico. What is the secret? In these two areas, health officials and the OMM [Organization of Mozambican Women] have been actively conducting an information campaign among the people. This is very valuable support and this experience should be extended to all the other districts.

Today, we still have children dying from complications resulting from measles, such as bronchial-pulmonary problems, diarrhea and encephalitis, among others. Pneumonia is particularly prevalent in Maputo.

At this time, efforts are being made to overcome the outbreak, but the decisive factor is the community. By vaccinating the children, we prevent the loss of so many lives which are the revolution's most precious capital.

RAT POISON SUSPECTED VICTIMS—Five deaths were recently registered in various points of the city of Maputo, all of them involving young children. It is suspected that the deaths were caused by the ingestion of insecticide. At the Xipamanine market, rat poison is being sold in small unlabeled plastic bags for 15 meticals each. It is thought that the young victims swallowed the insecticide, mistaking it for some food product. [Text] [Maputo DOMINGO in Portuguese 25 Oct 81 p 2]

SOFALA PROVINCE CHOLERA OUTBREAK--A limited outbreak of cholera was registered 10 days ago in the 25 September communal village in Marromeu, province of Sofala. According to information received by our newspaper, the outbreak has already caused one death, while three other cases have been hospitalized. Out of these, two cases have been confirmed, and the other is a suspected case. The village well was tested and it showed a degree of contamination; it was therefore closed in order to prevent the spread of the disease. The local latrine was also closed, as it was found to be located next to the well, thus breaking all sanitation rules. The entire population of the village has been vaccinated. To date, there have been no other cases of cholera in Marromeu, as well as in other localities of the province of Sofala. [Text] [Beira DIARIO DE MOCAMBIQUE in Portuguese 19 Oct 81 p 3]

#### BRILFS

LASSA FEVER SCARE OVER--The Hague, October 22--A young Briton isolated in a hospital in Amersfoort last Friday with a suspected deadly tropical disease is not as ill as doctors first feared, the Ministry of Health said today. Blood tests carried out by Dutch tropical disease specialists indicate the unnamed 27-year-old is not suffering from highly infectious lassa fever but rather from the less serious African tic fever, also known as Marseille fever. The man was on his way to Britain from Nigeria when he was taken off a Dutch airlines flight at Amsterdam. He was now recovering and would be able to continue his journey when he was fit, the spokesman said. Authorities have called off the search for people who might have been infected through contact with him. [See JPRS #79417, 10 Nov 81, page 4, for original article on suspected case of lassa fever.] [Text] [The Hague ANP NEWS BULLETIN in English 22 Oct 81 p 2]

HEALTH VICE MINISTER DISCUSSES CONJUNCTIVITIS OUTBREAK

Managua BARRICADA in Spanish 19 Oct 81 p 7

[Article: "Conjunctivitis Is Factor in Work Absenteeism"]

[Text] (ANN)--Vice Minister Dr Ivan Tercero said that "hemorrhagic conjunctivitis" is a factor in the absenteeism of the working class that is engaged in productive work.

He said that the virus has now penetrated the Pacific area. In September there were about 1,648 cases of hemorrhagic conjunctivitis in Bluefields, a town on the Atlantic coast.

He said that the malady is contracted through direct contact with a person who suffers from "pink eye" and with objects of personal use-towels, pillows, pillowcases, and toilet articles.

The health official indicated what c'ould be done to avoid contracting the epidemic disease and to avoid arrears in productive work. He said that the population must observe good personal hygiene and avoid contact with anyone afflicted with conjunctivitis.

He also mentioned the elimination of flies and mosquitos through the clearing and constant cleaning of green areas and idle land, and the burning of refuse.

Dr Tercero said that hemorrhagic conjunctivitis is a benign disease of viral origin, with a 24-hour incubation period. He said that it has been observed that it is difficult for many sick persons to open their eyes and that they have an abnormal intolerance to light, known as photophobia.

As of now there is no vaccine virus or medicine to prevent "pink eye," added Dr Tercero, and said that the afflicted should not administer self-medical treatment, and that those who contract the viral malady require a week's visual and physical rest, during the period of the malady.

He stated that the symptoms of the disease are: hot and itchy eyes, red and inflamed eyelids, and the appearance of red dots, even small, medium, and larger hemorrhages, in the white part of the eyes.

The Vice Minister of Health concluded by saying that the malady has spread. He therefore advises all of the people's organizations to instruct the people in the measures that should be taken and to visit hospital centers when symptoms of hemorrhagic conjunctivitis appear.

8255

# HEALTH MINISTRY OFFICIAL DISCUSSES TB PROGRAM

Managua EL NUEVO DIARIO in Spanish 7 Oct 81 p 7

[Article: "Fifty-five Thousand Children Vaccinated Against TB]

[Text] Managua (ANN)--Dr Pablo Cuadra, director of the tuberculosis prevention program, said that, as part of the massive tuberculosis prevention program, the Health Ministry vaccinated approximately 55,000 children, up to age 5, during the first half of this year.

Cuadra added that, in spite of massive anti-tuberculosis campaigns, 1,831 new cases have been ascertained, which brings the number of cases checked by the MINSA [Ministry of Health] up to 4,000.

He explained that the above mentioned number does not reflect the true situation of the disease in Nicaragua, because many cases are not controlled by the MINSA because there are sick persons who stubbornly refuse medical treatment. About 50 percent of the sick persons abandon their treatment after 6 months, whereas the treatment requires a minimum of 1 year.

The increase in the number of persons with tuberculosis who are under treatment is due to the fact that there are improved research and verification mechanisms, added the MINSA spokesman. During the Somoza regime, persons sick with the Koch bacillus were not checked and the only means of detection was the X-ray plate, whereas the most effective means is the sputum test.

Doctor Cuadra added that many sick persons used to remain on the sidelines, because tuberculosis was considered to be a contagious and incurable disease.

Another problem left over from the Somoza regime was the nonexistence of a sanatorium equipped to cure the sick, with doctors who could teach the sick to continue their medical treatment until completely recovered.

The Public Health Department ascertained that the majority of the tuberculosis cases are in the departments of Leon, Chinandega, Managua, and Matagalpa, among the poorest people.

The Revolution instituted three tuberculosis sanatoriums: Aranjuez, in Matagalpa; "Rosario Lacayo," in Leon; and a building connected with the San Pablo hospital in Bluefields.

In conclusion, Doctor Cuadra said that it has been verified that the tuberculosis suffered by miners is curable through treatment.

8255

#### HEALTH MINISTRY TO BEGIN ANTIMALARIA CAMPAIGN

Managua LA PRENSA in Spanish 24 Sep 81 p 5

[Text] In a campaign without precedent on a world level, the Ministry of Health of Nicaragua intends to reduce the incidence of malaria to controllable levels in just 3 days.

In a small press conference held today, the Nicaraguan director of the program of eradication of malaria, Dr Milton Valdez, explained that this task, undertaken in the usual way, would take at least 10 years and many millions of cordobas.

Doctor Ricardo Rios, consultant from the Panamerican Health Organization, explained that at present, Nicaragua, Central America in general and southern Mexico are facing a serious problem with regard to the carrier of maleria, which has developed progressive resistance to all the insecticides which have been used against it.

"All of a sudden, we are going to start firing guns at them," quipped Doctor Valdez, to indicate the renewed difficulty in combatting the manquitoes, when each weapon which was being used has been failing.

Until 1964 there were 14 different varieties of anopheles mosquitoes in our country which transmit malaris in the same way that the famous Aedes Aegiptis transmits dengue.

One by one, the effects of DDT, Malathion and Baygon which first killed the adult mosquitoes, has been failing, the insect developing a total immunity for each one of them, which was to be substituted by other insecticides more powerful or with distinctive properties.

It is a grave problem because the country now lacks sufficient insecticides and it has become necessary to fight with new lethal chemicals such as phosphorous insecticides, synthetic piretroide and carbonates to halt the terrible rise in the disease.

In 1980 alone 25,465 cases were reported and since it is believed that only half of the cases were reported, the figure reaches nothing less than 50,000 cases in the most productive cities of the country: Managua, Leon and Chinandega, which is a double disaster, economic and social.

But of greater importance still, is the incalculable damage which this endemic disease leaves annually for human lives which it affects, which is higher than it appears, mainly in the cases of plasmodium falciparum which is more serious than plasmodium vivax, although less resistant to treatment of the drugs chloroquine and primaquine.

Against this panorama, and advised by experts of different countries, the minister of health has decided to apply the necessary doses of chloroquine and primaquine to not less than the entire population of the country.

These drugs in conjunction not only cure those who already have the disease but act as a preventive vaccine for healthy people.

On 14, 15 and 16 October, a brigade of health volunteers estimated at 70,000 will travel throughout the entire country carrying the dose of drugs for each inhabitant in each household, in each work center.

Nine million packets containing the doses necessary for each person in each one of the 3 days will pass from hand to hand until every Nicaraguan or visiting foreigner will ingest the total dosage in the necessary period of 72 hours.

9678

# ANTIMALARIA CAMPAIGN TO BE HELD IN NOVEMBER

Widespread Antimalaria Campaign

Managua BARRICADA in Spanish 10 Oct 81 p 12

[Article: "Antimalaria Campaign Postponed"]

[Text] Minister of Health Lea Guido announced yesterday that massive anti-malaria medical treatment has been postponed to 4, 5, and 6 November.

The operation had been scheduled for 14, 15, and 16 October.

Lea Guido explained that the postponement in dates is due to: the need for greater participation on the part of the people and greater organization of peoples' health units; delays in the supply of documentation and pills; and the ministry's decision to conduct a more widespread campaign with regard to the sanitary, economic, and social importance of the anti-malaria operation.

She also stated that the massive anti-malaria medical treatment program has been successful in Puerto Cabezas and Waspan, both on the northern Atlantic coast.

Ninety-five percent of the inhabitants were treated; 5 percent gave various reasons for not taking the pills.

Since the people have already been immunized there, persons going from the Pacific to Puerto Cabezas and Waspan will be given health checks.

For example, comrades who travel by plane to Puerto Cabezas and Waspan will be given health checks. The military will be given similar checks.

#### It Is Not Harmful

The announcements were made at a press conference in which the following participated: Dr Ivan Tercero, vice minister of health; Dr Milton Valdez, in charge of control and eradication of malaria; Dr Rafael Cabrera, in charge of gynecology-obstetrics, in the MINSA; and Auxiliadora Sanchez, for the Sandinist Defense Committees.

Lea Guido explained that it is necessary to make it clear that this massive medical treatment will not eradicate malaria, but it will decrease to a minimum the present rate of increase that has caused so much harm to the population, in both rural and city areas.

PAHO Official on Campaign

Managua BARRICADA in Spanish 18 Oct 81 p 12

[Article: "PAHO [Pan American Health Organization] Director: 'Dengue Has been Conquered; Malaria Will Also Be Eradicated'"]

[Text] "Tests conducted in comprehensive anti-malaria campaigns during the past 20 years in Africa, Asia, and Latin America indicate that primaquine and chloroquine do not harm pregnant women or children."

Dr Miguel Angel Marquez, director of the Pan American Health Organization (PAHO) in our country, made the above statement yesterday in a press conference that was held at the organization's headquarters.

Dr Marquez pointed out that it is not the medicine, but malaria, that harms the women and children. The damage is in the form of miscarriage, liver trouble, malnutrition, and also deterioration in capability to work.

He said that the dose to be administered in the massive medical treatment campaign that will be carried out on 4, 5, and 6 November will be supervised by the PAHO and that it is definitely certain that it is the correct amount.

"The anti-malaria campaign is not being carried out on an experimental basis, but for what it is: an activity by the government for the benefit of the people," said Dr Marquez.

The PAHO official said that at the time of the triumph of the Revolution, there was a high incidence of malaria in our country. Because of that situation, it was necessary to conduct a study on malaria by collecting background information in order to understand the present situation.

The Ministry of Health researched more than 200 scientific documents worldwide.

Marquez said that, through the PAHO, that organization's director of anti-malaria programs came to Nicaragua with a record of more than 25 years of work in Asia, Africa, and Latin America.

The experience of Canadian and United States officials, who made five visits to Nicaragua in 1980 and 1981, was also consulted. Other consultants include: Dr Rolando Cifuentes, university professor of malariology in Venezuela, and Dr Ramon Martinez, a Cuban doctor and malaria health consultant in Mexico.

Dr Marquez said that in order to carry out the campaign the Ministry of Health had to compile a great deal of information on malaria.

Community Participation

Dr Marquez added that, upon arriving in Nicaragua, the PAHO director was amazed at the organized participation of the people in their health tasks. We also have believed since then that Nicaragua will be one of the healthy countries before the year 2000.

He indicated that the PAHO has carried out the extraordinary work of controlling the mosquito that carries the dengue virus. There has not been even a single case of dengue here and that is a great achievement for the Ministry of Health, the government, and the people," he said.

"If the country was able to conquer the mosquito that carries the dengue virus, we are certain that a similar success will result from the massive anti-malaria medical treatment," he continued.

Assistance of \$4,830,000 in 1980-81

Dr Marquez stated that the PAHO had an assistance allotment of \$4,830,000 for several programs carried out by institutions like the INAA, Ministry of Health, and UNAN [National Autonomous University of Nicaragua].

The contribution was designated for the development of a network of educational centers in the country; the training of technicians, assistants, and professionals; immunization programs; and studies in connection with preparations for the anti-malaria campaign and the conformation of health areas.

In the 1982-1983 2-year period, an endeavor will be made to utilize to the fullest the technical and financial resources that we expect to receive from a fund of \$7 million 300 thousand for whatever the Ministry of Health deems necessary, always taking into consideration the need for preventive medical programs," pointed out the official from PAHO, the 75-year old organization that brings together 154 of the world's countries.

8255

MENINGITIS CASES REPORTED--An epidemic of viral meningitis is still present in the metropolitan area, a Health Ministry communique said yesterday. Panama City, Arraijan, La Chorrera, Colon and environs comprise the metropolitan area. A total 728 cases was recorded up to Tuesday night, but Dr Guillermo Campos, the ministry's chief epidemologist, said in all the total was 745 cases up to noon Wednesday, including five confirmed cases in Chiriqui Province and 13 in La Chorrera, some of them from nearby areas. The Gorgas Memorial Laboratory has identified the meningitis virus as Echo-4 and has agreed with the Health Ministry's recommendations on ways to prevent the spread of the disease: Intensify personal hygiene, including frequent washing of hands. Avoid unnecessary gatherings (parades, parties, trips to the interior, etc) in order to limit propagation. Symptoms of meningitis are fever, vomiting and headaches. Panama City Government clinics will remain open from 7 am to 3 pm daily during the independence festivities which begin Sunday and end Wednesday. All other government agencies, except hospitals, will remain closed over the 4-day holiday period. The highest incidence of viral meningitis is among 4 and 6 year-olds, with a few isolated cases among 15-year-olds. [Text] [PA301557 Panama City THE STAR AND HERALD in English 30 Oct 81 pp 1, 4-6]

# MALARIA EPIDEMIC HITS AURORA

Manila BULLETIN TODAY in English 10 Nov 81 p 24

[Article by Rodante Rubio]

[Text]

BALER, Aurora, Nov. 1
9 — Provincial health
authorities here have
reported an outbreak
of malaria in at least
five towns of this province.

They said that 87 malaria cases were reported in the towns of Casiguran, Dilasag, Dinalungan. Maria Aurora and Baler.

Dr. Romeo Chua, chief of the Aurora Provincial hospital said, during the last four days, at least 50 patients were brought to the hospital

He reported that the disease has spread swiftly into the different towns and has so far claimed the lite of a 24 year-old fisherman,

from Semento, Baler.

He said the people's ignorance, lack of communication and transportation and primitive practices have compounded the situation.

pounded the situation.

Chua said he is expecting more malaria victims, mostly children, to be brought to the hospital in the next few days as it has already become an epidemic.

Malarla e r adication service (MES) officials have cautioned the Aurora inhabitants that 'plaswo d i u m falcifarium," a malaria strain which causes death was found afflicting \$7 patients.

Liberato Estrella, head of the malaria eradication service in Baler, said remedial measures are being undertaken by the MES and the provincial health office in affected areas, including epidiomological surveys, biological and environmental measures and mass administration.

Estrella, however, noted the lack of manpower of the MES in the province to beef up the current anti-malaria campaign being undertaken by their office.

Malaria is transmitted by a carrier mosquito called the "anopheles minimums" which thrives on creeks, rivers and stagnant water.

cso: 5400/4908

# APIES RIVER WATER CONTINUES CHOLERA SPREAD

Johannesburg THE CITIZEN in English 10 Nov 81 p 3

[Text] The continuing cholers epidemic in the Hammansbraal area is being spread

demic in the Hammanskraal area is being spread by the germ-polluted water of the Apies River which has its source in Pretoris and, among other things, carries the sewerage effluent and the street dirt of the capital.

This statement was made yesterday by Dr Gerald Malan, Superintendent of the Jubilee Hospital at Themba, near Hammans-kraal. But he stressed that the water of the river was constantly being tested by the Water Department of the Pretoria City Council.

"They have never found any cholera germs in the water when it leaves the city," Dr Malan said.

"Possibly the germs are being spread by illegal sewerage effluent from unknown sources to the north of Pretoria."

According to Dr Malan, there are more than a 100 supply points along the river where people can collect chloride to chloridise the water in an attempt to purify it.

"However, it seems many people are not making use of these facilities," Dr Malan said. He warned inhabitants not to use the water before it had been cooked or chloridised. During the past weekend, about 33 people more were admitted to the Jubilee Hospital, suffering from cholers.

Dr Malan mentioned the sweltering heat wave which schorched the Transvaul during the past few days as an instigator for the rise in the number of cholera cases.

"It seems that the choiera germ flourishes in tropical and sub-tropical weather," Dr Malan said.

An obvious result of the heat was that people drank more water and also swam

more water and also swam more regularly.
"In September, when the outbreak started, we admitted about 200 cholera cases. Afterwards, the number decreased to about 10 or 20, but the disease still claims victims."
The chloridisation of the

water must only be seen as a temporarily measure.

"The only way I can see to end the disease from spreading, is to supply everybody in the area with purified water," Dr Malan and

CHOLERA SCARE AT CONFLUENCE OF ZULULAND RIVERS

Johannesburg THE CITIZEN in English 13 Nov 81 p 13

[Article by Tim Clarke]

[Text]

DURBAN. — The kwaZulu Health Department has started a major campaign to combat and control what is suspected to be an outbreak of cholers in the Ingwavums district.

So far a disease, thought to be cholers, has claimed the lives of four souths and a child and at least another 34 cases

are being treated.

Army personnel based at Jozini Dam are assisting kwaZulu health officials. They have established a tent town near
the Mosveld Mission Hospital where most of the patients are
being treated. The army has also supplied an ambulance to
help the local community.

According to the Acting Medical Superintendent of the
Mosveld Mission Hospital, Dr W J Robartes, it was almost
certain that there was a cholera outbreak in the area. Patients had all the symptoms of cholera, but he was awaiting
results of tests to prove conclusively that they were cholera
victims.

The first case was admitted about ten days ago. But the numbers had grown rapidly and patients were now being admitted at the rate of up to six a day. Most were bables or young children

young children.

Most of the patients came from the Nduma village. Others came from an adjoining area near the Makani Drift.

Dr Robartes said the source of the water-borne disease appeared to be confluence of the Pongola and Ingwavuma rivers, where all the patients had drawn water.

The most severe symptom of the disease was acute diarrhoea and treatment consisted mainly of anti-biotics and the replacement of lost fluid.

The disease was seasonal and simple hygiene procedures, such as first boiling drinking water and washing the hands before meals were the main procautions to be taken.

The kwaZuiu Minister of Health, Dr F Maddde, yesterday said officials of his departement were doing all in their power to combat the disease. They had visited the Induma village and the Makani Drift area warning people to boil their water. His officials were working day and night with the co-operation of the army to bring the disease under control. troi.

#### NEW DISEASE SPREADS IN NORTHEAST

Bangkok DAO SIAM in Thai 11 Jul 81 pp 1, 10

[Text] A new disease called cappillaria is spreading in Thailand and has already caused seven deaths and hundreds cases of sickness. Doctors claim it is more devastating than cholera; its symptoms includes a severe, long-lasting diarrhea, which causes exudation of fluid into the lungs and a fatal heart attack. The disease was found to have originated in Samut Prakarn Province, and its carriers are fresh-water fish.

Dr Manun Phaibun, a parasitology specialist at the Faculty of Tropical Medicine at Mahidon University, and secretary of the Parasitology Society of Thailand, disclosed to reporters of the Thai News Agency this afternoon that doctors at the Srisaket Hospital had reported an outbreak of cappillaria disease throughout Srisaket Province last week. According to the report, 30-40 victims, who have had diarrhea for 2-3 months, were receiving treatment at the hospital. More victims were arriving at the hospital and seven deaths have been reported.

It was further reported that a hundred villagers have contracted cappillaria, and the most serious cases were found in the districts of Khuk Khan, Phraibeung, and Prangku. The majority of the victims are male, whose ages are between 20 and 40. Srisaket Hospital is trying to locate these victims so that it can provide treatment for them.

Dr Manun further explained that cappillaria is more dangerous than cholera, and a lengthy course of diarrhea causes the victims to become weak as in the case of malnutrition. The disease can cause death from the exudation of fluid into the lungs and a fatal heart attack. The disease was reported to be contracted from consumption of raw fresh-water fish-a popular eating habit among the northeast population. Several kinds of fresh-water fish have been found to carry the disease, which multiplies once it is planted in the human body. The disease is more difficult to treat than cholera since it is a new and unfamiliar disease; improper treatment can cause death. Most doctors do not realize that the patients have contracted cappillaria and simply begin to treat them for diarrhea.

It is warned that the people who have had diarrhea for a lengthy period must see a physician and must not take medicine on their own. They must also cook their food prior to consumption. The Ministry of Public Health was asked to dispatch its officials to examine the outbreak in order to try to find a means to prevent the spreading of the disease. Dr Manun further disclosed that there has never been an outbreak of cappillaria in Thailand; a few patients with similar symptoms were found in Samut Prakarn but there was no epidemic. It may have been an outbreak but the disease was unknown to anyone. As a result, the victims were mistakenly thought to have died from diarrhea. A cappillaria outbreak, however, was reported to have caused approximately 1,000 cases of sickness and 200 deaths in the Philippines ten years ago.

9013

THAILAND

# HEMORRHAGIC FEVER SPREADS IN UDON

Bangkok TAWAN SIAM in Thai 6 Jul 81 pp 1, 16

[Text] TAWAN SIAM has received a report from Dr Sitthichai Pung-in, director of Kumphawapi Hospital, Udon, that there has been an outbreak of hemorrhagic fever in Kumphawapi District and the fever is spreading to the adjacent districts of Wangsammo, Srithat, Nonghan, and Kranuan.

In Kumphawapi alone there have been 30-40 patients receiving treatment and examination each day at the hospital. It has also been reported that three victims died at the hospital, and it is unknown how many deaths have occurred at home. However, some Phu-Thai patients from Srithat District have indicated that four deaths have been counted at Nayung and Nongyasai Village.

Dr Sitthichai further explained that the hemorrhagic fever generally breaks out in May, and the unusual outbreak in March in Kumphawapi, the first in the nation originated in Sichae Village and spread through nearby Donkhaen and Chiangwae villages.

Kumphawapi Hospital has provided treatment to 441 patients, 200 of whom were treated in June alone, overloading the hospital's capacity. These patients, most of whom were children and only two were adults, 36 and 40 years old.

In order to prevent the spreading of the fever, the provincial public health division and district authorities have been spraying chemical fog against mosquitoes, distributed treated sand to sprinkle in mosquito-infested areas, and given advice on the prevention and treatment of the fever every day.

Following the meeting with Dr Chin Yuwachit, chief of the Public Health Division in Udon, a TAWAN SIAM reporter received additional information that the breakout has subsided somewhat in Kumphawapi District, but is still spreading in Bandung District, where it is also expected to subside soon. Dr Chin finally warned the people to be alert and to seriously prevent the spreading of the fever.

9013

THAILAND

#### HEMORRHAGIC FEVER OUTBREAK REPORTED IN NORTH

Bangkok TAWAN SIAM in Thai 12 Jul 81 pp 1, 16

[Text] Hemorrhagic fever spreads throughout northern Thailand, causing the deaths of two children. The most serious outbreak was in the provinces of Chieng Mai and Lamphun, where the municipalities are urgently exterminating striped mosquitoes. Both children and adults have been reported to contract the fever.

On 11 July 1981, a report from Chieng Mai indicated that the hemorrhagic fever was spreading in Chieng Mai and Lamphun, where hundreds of villagers have become ill, thus prompting a reporter from TAWAN SIAM to meet with Dr Manu Maenmontri, director of the Chieng Mai Public Health Division, to obtain additional information on the matter.

Dr Manu disclosed that not only children, but also adults have contracted the fever; two deaths among children have been reported. There are several areas in which the disease is spreading. Pa Sang District of Lamphun and the districts of Sanpatong and Hangdong as well as areas in the municipality of Chieng Mai have become seriously ill from the fever.

The latest report also revealed that the fever has spread throughout all districts of Chieng Mai and Lamphun, and may spread to other adjacent provinces if it is not controlled. The Chieng Mai municipality has, however, dispatched its officials to exterminate striped mosquitoes, the main carriers of the hemorrhagic fever, between 12 and 14 July.

Dr Manu further added that the Ministry of Public Health is responsible for and has been working to prevent and exterminate the disease for the people who reside outside the municipalities of the two provinces.

9013

THAILAND

#### BRIEFS

NARATHIWAT CHOLERA--Dr Nadda Sriyaphai, director-general of the Department of Contagious Disease Control, disclosed that the number of cholera victims in Narathiwat Province has increased to 15 or 16, and one or two deaths have been reported. The department's officials have therefore been ordered to be alert to pay close attention to the outbreak. Dr Nadda further indicated that it was unusual for cholera to break out at the beginning of the rainy season, but the department was awaiting further reports from Narathiwat. Generally, influenza is the only outbreak at this time of year and is contracted by students at various schools. [Text] [Bangkok SIAMRAT in Thai 13 Jul 81 pp 1, 12] 9013

MEASLES EPIDEMIC--Montevideo, 23 Oct--One adult and 42 children have died in the measles epidemic raging throughout Uruguay, the Public Health Ministry said Thursday. Ministry official Leonel Lopez Moreira blamed the inability to contain the disease on the population's poor reception of vaccination campaigns begun in 1969. The disease, which predominantly affects children between six months and two years of age, began in Artigas, several hundred kilometres northeast of the capital. A programme of vaccination for all children younger than two years is under way.--NAB/AFP [Text] [Rangoon THE WORKING PEOPLE'S DAILY in English 25 Oct 81 p 7]

#### MEASURES TAKEN AGAINST FOOT-AND-HOUTH DISEASE

Dacca THE BANGLADESH OBSERVER in English 18 Sep 81 p 3

[Text] Effective measures have been taken to combat the foot and mouth disease of cattle which has broken out at different places in the country Deputy Prime Minister Mr. S. A. Bari A.T. said on Wednesday.

Talking to BSS just after a meeting of the senior officials of the Ministry and Livestock Department, the Deputy Prime Minister said special medical teams with adequate medicines have already been sent to the places where the foot and mouth disease has broken out in an alarming form.

Mr. Bari who is also in charge of the Ministry of Fisheries and Livestock, added that livestock officials and workers at thana level had also been asked to conduct mass vaccination programme as a preventive measure against different livestock diseases.

The Deputy Prime Minister, himself will visit on September 22 Banderia and Kathalia under Jhalokati subdivision of Barisal district where the foot and mouth disease has reportedly broken out in an epidemic form.

According to the Director of the Livestock, the foot and mouth disease, a highly complex and virus disease was a seasonal disease in the recent past, but since last year it has been breaking out in mass scale in the country causing a huge loss of livestock.

He described malnutrition and stagnant water mixed with poisonous insecticides as the main cause of the disease.

Reports of the attack of the foot and mouth disease from the lowlying areas of Barisal, Patuakhali, Noakhli, Chittagong, Khulna, Kushtia, Kishoreganj Joypurhat Ukkelpur, Rupganj, Lalmonirhat, Serajganj and Noagaon have so far been received.

#### VACCINE LAB OPENS IN GABARONE

#### Foot-And-Mouth Vaccine

## Gaborone DAILY NEWS in English 7 Oct 81 p 1

## [Article by Monty Letshwiti]

[Text]

BOTSWANA'S foot and mouth disease vaccine factory, will be opened on October 27, in Gaborone

Making the announcement in Palapye, the Minister of Agriculture, Mr Washington Meswele said the factory would produce 12-million doses which would be enough for both local consumption and for the world market.

The Minister was replying to an appeal by cattle-producers in the Tswapong area who called on Government to strengthen foot and mouth disease control measures and that Government establish something in the form of a livestock disease control treaty with the Zimbabwe government to avoid further outbreak of the disease in this area.

The Minister explained to the cattle producers that the vaccine factory, the largest in Africa, would export the vaccine mainly to neighbouring African states

Botswana like other Frontline and Commonwealth member countries, was buying foot and mouth disease vaccine from the United Kingdom until the late 70's when the British vaccine failed to cure a virus discovered in Botswana.

Botswana, with French assistance discovered an antidote to the new virus after the UK had informed Botswana that it could not produce the vaccine to combat the new foot and mouth virus which was neither common nor known in Europe

Botswana and France signed economic and development cooperation agreement in the last half of 70s. The cooperation covers French assistance in the fields of agriculture, education and mining industry. There are Batswana already in France, studying different courses and French mining companies have already started work in Botswana.

The Minister, who answered many topics on agriculture, explained that negotiations and regular consultations concerning livestock movement between the two countries do exist and that they have been existing for sometime.

Mr Meswele also disclosed that Botswana was even prepared to help Zimbabwe further, in the field of animal health. The Minister was responding to the Palapye's local authorities, who were requesting the government to help Zimbabwe to eradicate foot and mouth disease, in the interests of the two countries

On the bull subsidy scheme and electricity installations Mr Meswele explained that costs were reasonable and that there were decided and determined according to the individual financial ability.

The local authorities, on behalf of the Palapye community, had complained that the purchase prices for the bulls under the present bull subsidy scheme were very high for the small farmers.

They also reacted sharply against what they called extremely expensive electricity installation in both private houses and business centres in the rural areas.

Dissastifactions was also expressed about the services of some of the Government ministries and departments, including information and Broadcasting.

# Dosage Correction Printed

# Gaborone DAILY NEWS in English 12 Oct 81 p 2

[Text] The article, quoting the Minister of Agriculture on the Iront page of the Daily News of Wednesday October 7, states that the vaccine production will be 12 million doses per annum. The correct figure is 21 million doses per annum. We regret the typing error.

EUROPEAN DISEASE VACCINE—Dr Charles Meriuex, President of the Meriuex Foundation of France, has said the Foundation was considering to produce a vaccine for Rift Valley Fever, a disease common to livestock in Europe, at the Botswana Vaccine Institute. Dr Meriuex was responding to President Masire's opening address at the Institute this week. He explained that the disease was "a haemorrhagic fever which menaces man and animals in Europe." "We have shown that it is possible to set up, in Africa, with Botswana people, a laboratory which is capable of producing excellent vaccines for your country, and even for export," Dr Meriuex maid. Earlier the Permanent Secretary in the Ministry of Agriculture, Mr David Pinlay, had passed a vote of thanks to all those who contributed towards the successful setting up of the vaccine institute. Mr Finlay particularly thanked the Botswana Government for the co-operation they had offered. He also paid a tribute to the European Economic Community (EEC) without whose financial support, he said, the pilot project might never have got off the ground. [Text] [Gaborone DAILY NEWS in English 29 Oct 81 p 1]

CATTLE VACCINATION—A vaccination campaign against Black Quarter and Anthrax diseases, starts today at Otse and Mogobane. This follows the death of a cow which was confirmed to have died from black quarter, after a veterinary examination. According to the Otse-based Agricultural Supervisor, Mr Peter Diutlwileng, 10 cattle died last month around Mogobane and another eleven in Otse, bringing the total to 21. It was disappointing, he said, to note that some farmers did not look after their livestock carefully, particularly after the crop harvest. Of late he said, two carcasses were found rotting in the vicinity of Mogobane without any claimant. Mr Diutwileng also explained that water was in abundance in his area and grass condition was generally fair. He further added that he was confident that cattle would be in good condition to plough at the beginning of next month. The Agricultural Supervisor called on farmers to give their cattle supplementary feeds such as bonemeal and salt to further improve their physical condition.

[Text] [Gaborone DAILY NEWS in English 8 Oct 81 p 1]

FOOT-AND-MOUTH-OUTBREAK--The National Animal Health Program of the Ministry of Agriculture and Livestock is taking measure to control the foot-and-mouth disease which is infecting 27 ranges in the Amaguana and the Uyumbicho areas. The foot-and-mouth disease has been found especially at the Pilopata farm where animals belonging to small proprietors graze. A high percent of that livestock is infected. Spokesmen for that program indicated that the appearance of the outbreaks is due to the fact that the small proprietors of cattle do not follow systematically the vaccination program established for the prevention of the disease. It is worth noting that this measure should be carried out every 4 months, that is, three times a year. The program's technicians are giving vaccinations in the areas immediately surrounding these outbreaks and are controlling the outbreaks in the infected areas. The National Animal Health Program is asking for the cooperation of the cattlemen and the small proprietors by avoiding the transportation and movement of animals in the infected areas, reporting the outbraks promptly to the ministry's technicians and requesting the appropriate vaccinations. [Excerpt] [Quito EL COMERCIO in Spanish 13 Oct 81 p B 8] 9204

FOOT-AND-MOUTH OUTBREAK QUELLED -- Focuses of foot-and-mouth disease are under control in the canton of Mejia. The focuses of A 27 type foot-and-mouth disease that was afflicting the livestock of the canton of Mejia, in the parishes of Uyumbicho and Tambillo, are under control as a result of the cooperation of the cattle reachers of the area and the work that has been carried out by the technicians of the national animal health program of the Ministry of Agriculture and Livestock. Given the urgency of the situation, in addition to the usual system of perifocal vaccinations for the control of this desease, revaccinations were given in the afflicted areas to 3,000 animals. The animals that manifested the typical lesions of this disease are recuperating as a result of the technical health program that has been implemented. Health inspections that were made in the area have not revealed any new focuses of the disease. We continue to request the aid and cooperation of the small landowners and cattle ranchers of the area and of the country in the matter of giving timely notice of the presence of sick animals and the avoidance of any indiscriminate mobilization of animals, since this is the most likely means of transmission of the disease. [Text] [Quito EL COMERCIO in Spanish 29 Oct 81 p B 10] 8255

COCOA TREES' BLACK-POD DISEASE--Most farmers at Kadjebi, Aposokubi and Dodo Amanfrom have abandoned their cocoa farms. Others are cutting their trees down for the cultivation of food crops especially maize and cassava. The main thing scaring the farmers is the dreadful black pod disease that attacks cocoa. It is more than three years since the incidence of the black pod began in these areas. It's disastrous effect has since been worsening. The yield of the minor and the major seasons have been destroyed by this disease. In some farms one can hardly see a "golden pod." All over one finds blackened pods with white stains on them. This means that the farmers have been robbed of their income and have thus resolved to growing food crops. They argue that a bag of maize sells between \$800 and \$1000, and is therefore more lucrative. This then is the only alternative for the economic survival of the farmers. But it is a bad thing for the economy of the nation. I therefore call upon the authorities concerned to help the farmers with chemicals and other inputs to save their cocoa firms. [By Sam Ntow-Kummi] [Text] [Accra DAILY GRAPHIC in English 19 Oct 81 p 7]

#### BREAKTHROUGH IN FIGHT AGAINST BANANA VIRUS

Bombay THE TIMES OF INDIA in English 3 Oct 81 p 11

[Text] Pune, October 2--Scientists at the Indian Agricultural Research Institute (IARI) here have achieved a breakthrough in the fight against plant virus that has vastly affected the banana crop in the state.

Laboratory investigations followed by intensive field tests have led to a reliable diagnostic technique to differentiate between healthy and diseased suckers of banana.

The disease that hit banana crop in the coastal areas of Vasai-Palghar in Thane district, Kulaba, Ratnagiri and Sindhudurg districts has been labelled "bunchy top." It reduced the weight and legnth of the fruit and led to the disappearance of certain varieties from the market. The fruit is cultivated on nearly 1,700 hectares in this area.

The "bunchy top" was first discovered in Australia in 1891. From there it travelled to Ceylon, Kerala and was detected in the coastal areas of western India few years back.

Another disease that affected banana crop in the Jalgaon-Dhule region, where cultivation of the fruit is done over nearly 27,000 hectares, has been termed "infectious chlorosis." While "bunchy top" led to the total destruction of the crop, in the case of "infectious chlorosis" some returns were possible.

Dr. A. S. Summanwar, head of the Pune unit of IARI, said it was found that growers used daughter suckers for propagation under the erroneous belief that planting material was healthy which resulted in the multiplication of the virus, the diseased suckers being the primary source of inoculum.

Planting of disease-free suckers was the only remedy but the right kind of technique to differentiate between healthy and diseased suckers was not available.

The scientists have now come out with a successful technique based on colour reactions. The reaction is brick-red in the case of "bunchy top" and black in "infectrious chlorosis." By this method, the disease could be identified even if the infection is in the latest phase. The technique is now applied on a wide scale in the banana producing areas of Maharashtra. The detection of disease is done by dipping small pieces of the plant's trunk in a solution prepared by the IARI. The Banana Research Centre at Yawal, in Jalgaon district, and the farmers in the Vasai area have been actively cooperating with the IARI scientists in their endeavour.

BLACK SIGATOKA WARNING--The Ministry of Agricultural Development has announced that outbreaks of black sigatoka (mycosphaerella fijiensis difformis variety) have been reported in Bocas Del Toro and Chiriqui Provinces. In order to stem the spread of the disease, the transportation of banana and plantain seeds out of these provinces has been prohibited, fruit grown in those provinces must be washed with detergent before being shipped out and the leaves of the plants may not be used for transportation purposes. In addition, quarantine posts in those provinces have been advised to enforce these regulations. [Panama City MATUTINO in Spanish 27 Oct 81 p 4-B] The Panamanian Government has appropriated 200,000 balboas for initiating black sigatoka controls. Jose Agustin Espino, the deputy minister of agricultural development, explained that contamination of the Pacific Banana Corporation's plantations on the Pacific coast had forced its closing. [Panama City Televisora Nacional in Spanish 2245 GMT 30 Oct 81]

GRAIN BORER CAUSING EXTENSIVE DAMAGE

Rangoon THE WORKING PEOPLE'S DAILY in English 2 Nov 81 p 7

[Text]

DAR-ES-SALAAM, 31 Oct—An insect not previously seen in Africa is devouring food and property in central Tanzania and has made famine there almost a certainty, according to a team of British entomologists sent to identify the pest.

David Masanja, Principal Secretary in the Tanzanian Ministry of Agriculture, said today: "We're doing everything we can to isolate the area and follow the recommendations of the British experts".

"The situation is se-

The pest was identified two weeks ago by experts from Britain's Tropical Products Institute sent to Tanzania by the British Government after local efforts at identification failed.

The entomologists said the insect, which has spread throughout the Tabora region, in west central Tanzania, is prostephanus truncatus, commonly known as the greater grain borer.

# Widespread famine

A survey of villages in the region by the British team revealed that 30 per cent of stored maize had already been devoured, and that silos, wooden farming tools and household utensils were also being eaten. "Widespread famine is a certainty," the report said.

Mr Massnja said efforts were being made to contain the peat by stopping maize and other grains from being moved out of the region of about \$00,000 people.

Grain stores in Tabora were being aprayed and surrounding regions and nrighbouring countries had been warned to look out for the insect, he said.

Diploment estimate that up to 40,000 tonnes of mains will be needed to prevent famine in Tabora.

The insect was first, noticed in the region more than a year ago and, apparently because it is relatively large and fist moving, was given the name "Scania" by local farmers who thought it resembled the heavy-duty Swedish trucks assembled in Tanzania.

Previously the post had been known only in Central America and parts of the United States and was nowhere considered a very serious problem.

"But for some reason in Tabora it has thrived," said an American agronomist following the situation. "It is multiplying and gobbling up everything."—N.AB, Reuter

#### HANOI ON PLANTHOPPER THREAT TO RICE CROP

BK141504 Hanoi Domestic Service in Vietnamese 0400 GMT 14 Nov 81

[Text] According to the vegetation protection department of the Agriculture Ministry, brown planthoppers are continually causing damage to the 10th-month rice in the northern provinces and cities, and are likely to spread quickly and widely in the 1981-82 5th-month spring crop season.

We must now overcome the subjective thinking that, since this winter is on average much colder than previous ones, there will be fewer brown planthoppers as during the 10th-month crop season. Brown planthoppers usually survive through the winter and develop in April and May when the weather is warm and highly humid and when rice is in budding and milk stage--favorable conditions for planthoppers to develop and cause damage to rice.

All localities are reminded by the Agriculture Ministry to guide cooperative members in realizing the damage caused by planthoppers so that they can take preventive and control action--primarily preventive--actively and positively in order to prevent an epidemic, eradicate planthoppers quickly and prevent their revival.

All localities and cooperatives must implement the following eight general measures to prevent and control planthoppers:

- --Sow and transplant insect-resistant rice strains, expecially in those areas already affected by planthoppers, considering it a long-term and key measure of prevention and control in our country.
- -- In the 5th-month spring crop season, such rice strains as CR-101 and 1,561, Nong Nghiep 4B, IR-42 and CR-203 can be used.
- -- Soil in ricefields must be well prepared.
- -- Rice must be planted on schedule.
- -- The killing of leafhoppers on seedlings must be considered a mandatory and effective measure of higher economic results than killing insects on rice plants.

- --Combine the drive to kill planthoppers with the killing of such other insects as riceworms, stemborers, leafrollers and green flies.
- --Organize light and oil traps, and use chemicals and herbal products to catch plathoppers.
- -- Special chemicals must be used particularly at the right dose and the right time and in the right manner.

BEN TRE PESTS--At present harmful insects are seriously plaguing 40,000 ha of 10th-month rice in Ben Tre Province. The provincial agricultural supplies sector has provided the hardest high districts of Ba Tri, Binh Dai, Mo Cay and Cho Lach with insecticides. Meanwhile, the provincial agricultural service has sent cadres to the various affected areas to help the local peasants devise the best control methods. [Hanoi Domestic Service in Vietnamese 2300 GMT 8 Nov 81 BK]

BROWN LEAFHOPPER DAMAGE--According to the vegetation protection department of the Ministry of Agriculture, brown leafhoppers were and still are a threat to rice plants. Before 1979, brown leafhoppers affected only small areas, normally not more than 5,000-6,000 hectares in each rice crop. This year, however, the insects appeared in vast areas of the 10th-month crop. But thanks to their active pest control efforts, the northern provinces managed to limit the damage to their crops. In 14 northern provinces and cities, brown leafhoppers completely destroyed 1,300 hectares of the 10th-month rice, or nearly 1 percent of the rice areas seriously affected in which drastic pest extermination measures had to be applied. The rice yields in these areas were affected more or less seriously by the insects. All localities should apply active measures to prevent brown leafhoppers from damaging the 5th-month spring crops. [Text] [BK171348 Hanoi Domestic Service in Vietnamese 0400 GMT 17 Nov 81]

CSO: 5400/4521

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